

## WORK EXPERIENCE Work in the scientific field :

Medical Analysis Specialist in Urology Nephrology Centre, Mansoura University, Mansoura, Egypt (1998 – 2011)

#### 1- In Bacteriology

 I. Bacterial culturing; Prepare media and broth for use in pathogen testing as required. As cultivation of Fungi on Sabaroud Agar, cultivation of Bacteria on different nutrients solidified (like CLED Agar, Nutrient Agar, SS Agar, Mannitol Salt Agar, Mueller Hinton Agar, McConkey Agar and Blood Agar or liquefied Media (likeTrypticase Soy Broth, Mueller Hinton Broth, L.B. Broth and Selinite F Broth for several types of samples including Urine midstream, Sputum, Wound, Nasal, Ear, Throat, and Conjunctive Swabs or any other body fluids.

II. Bacterial Identification: isolation of infectious bacterial colonies and Identifying it using several manually biochemical tests like API(Biomerieux, France) and Crystal (Becton Dickinson, USA). Or automated biochemical tests like Microscan (Seimens, USA),Phoenix (Becton Dickinson, USA), Sensititer (TREK Diagnostic Systems, UK), and VITEK 2 (Biomerieux, France).

#### III. Antibiotic Susceptibility Testing: Manually by Disc Diffusion

Technique on Mueller Hinton Agar using different antibiotic discs or Epsilometer Test (E-Test), Automated detection of Minimal Inhibitory Concentration (MIC) using Microscan (Seimens, USA), Phoenix (Becton Dickinson, USA), Sensititer (TREK Diagnostic Systems, UK), and VITEK 2 (Biomerieux, France)

- **IV. Blood culture**: By VersaTrek (TREK Diagnostic Systems, UK), Bactec (Becton Dickinson, USA), and Signal (OXOID, UK)
- V. Acid Fast Staining (ziehl neelsen stain): Which involves sample preparatio and fixation of smear on the slide and staining with ziehl neelsen method.

VI. Infection control: That involves sterilization of operation rooms and take swabs to detect nosocomial infectious Gram-Negative or Gram-Positive bacteria.

#### VII. Virology and Serology: Detection of hepatitis B Markers (HBsAg,

HBsAb, HBeAg, HBeAb, Anti-HB Core IgM, and Anti-HB CoreTotal), Detection of hepatitis C Virus( HCV Ab) , Detection of Human Immunodeficiency virus (HIV Ag-Ab) , Detection of Hepatitis A uirus( HAV ), and Cytomegalovirus ( CMV IgG ,CMV IgM ) manually by ELISA (Enzyme Linke Immunosorbent Assay) using (Seimens, USA), (BIO-RAD, France), (MUREX,UK) ,or instrumentally by Micro-Particles Immunoassay ( MEIA ) using AXSYM and ARCHITECT i1000 SR(Abbott Laboratories, USA) and VIDAS (Biomerieux, France). Anti streptolysin O titre (ASO ), C-Reactive Protein (CRP) and Anti double stranded DNA (Anti ds-DNA).

#### 2- Molecular Biology:

- I. DNA Extraction: Manually by dissolving the target in Guanidine thiocyanate followed by isolation of DNA by Phenol Chloroform Iso-amyl Alcohol(25:24:1) followed by precipitation of DNA by Isopropanol; or using different DNA or RNA Extraction kits (ROCHE, PROMEGA, STRATAGENE ...etc.).
- II. Polymerase Chain Reaction (PCR) and Real Time PCR: For detection of TB, Hepatitis B & C virus, Cytomegalovirus (CMV) manually by GeneAmp 2400 & 9600 thermal cycler (perkin elmer, UK) or by automated instruments as Cobas Amplicore, Cobas TaqMan, AmplePrep/ Cobas TaqMan & Light Cycler (Roche, Germany), API Prism 7000 & StepOne (Applied Biosystems, UK).

#### 3- Urine Analysis

Dip Stick to detect Glucose, Ketone, Billirubin, SG, pH,

Blood, Protein, Urobilinogen, Nitrite, and Leukocyte; Microscopic Examination to detect pyuria , hematuria , proteinuria , and other significant crystals ( that reflect different types of renal stones), and also ova types.

#### 4- Chemistry Laboratory

That involving biochemistry analysis of K, Na,

Glucose (random, fast), P, Ca, Cl, BUN, Liver Functions, Lipid Profile and, creatinine in blood plasma of patient using Synchron CX7(Beckman, USA), blood gas profile for Intensive Care Patients using Radiometer ABL and Seimens(USA).

### 5- Hematology Laboratory

(CBC; Hemogram ) using Cell-Dyn (ABBOTT

Laboratories, USA).

Mother Tongue: Arabic Language. English: professional in taking.

#### 6- Blood Bank ;

involves blood group detection, cross-matching between the recepient Patients and donor blood for reservation of whole blood, plasma and, platelets for patients that face bleeding.

LANGUAGES SKILLS :

COMPUTER SKILLS:

Oriented with MsOffice 2003, 2007, 2010, windows (xp, 7, vista), some knowledge in hardware Troubleshooting.

SCIENTIFIC PUBLICATION\_:

## 1- M.I. ABOU-DOBARA, M.A. DEYAB, E.M. ELSAWY and H.H. MOHAMED

Antibiotic Susceptibility and Genotype Patterns of *Escherichia coli*, *Klebsiella pneuomoniae* and *Pseudomonas aeruginosa* Isolated from Urinary Tract Infected Patients.

Polish Journal of Microbiology Vol. 59, No 3, 207–212, 2010

# 2- ABOU-DOBARA M.I. , DEYAB M.A.\*, ELSAWY E.M. and MOHAMED H.H.

Antibiotic Susceptibility of *Escherichia coli*, *Klebsiella pneuomoniae* and *Pseudomonas aeruginosa* Isolated from Urinary Tract
Infected Patients.
Assiut Univ. J. of Botany
38(2), P-P. 107-119, 2009

**References:** Dr. Essam Mahmoud Abdel Moneim Elsawy,

Consultant Medical Microbiology and Immunology and Head of the Laboratories Department., Urology and nephrology Centre, Mansoura University.

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